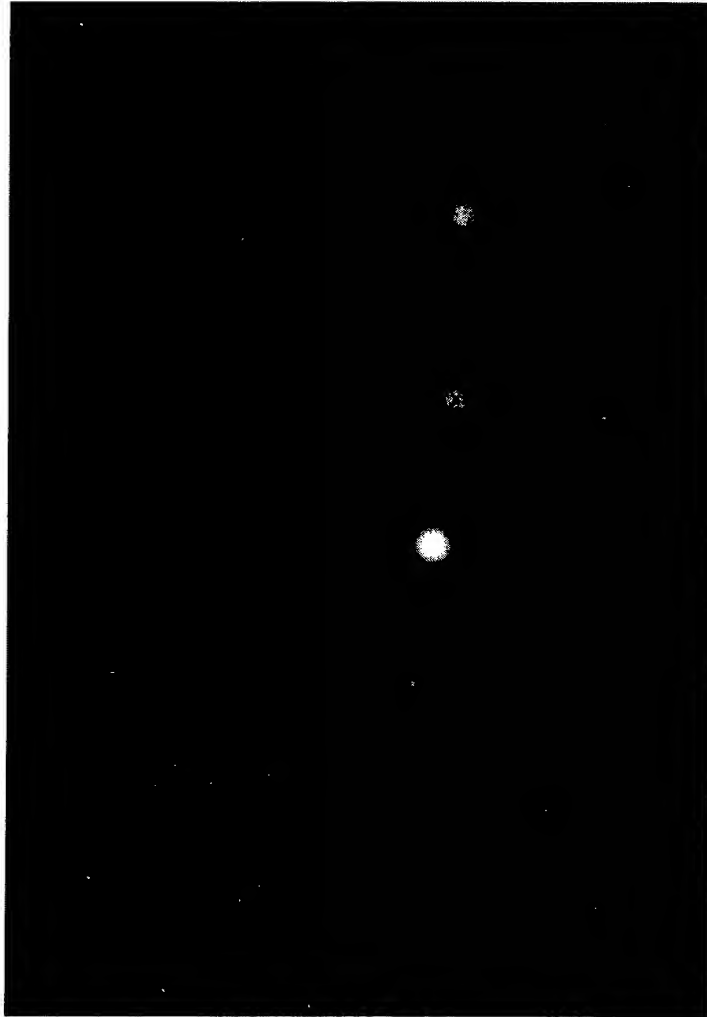


CYCLE
ADDED: 1 2 3 4 5 6 Black = Unlabeled Nucleotide
A C G T A C Red = Fluorescent Nucleotide



1

2

| | | | | | | | | | |
|-----------|----|----|---|---|---|---|---|---|-------|
| Sample 1: | 3' | P' | A | G | C | T | G | T | ...5' |
| | 5' | P | T | C | | | | | |
| Sample 2: | 3' | P' | G | T | C | T | A | T | ...5' |
| | 5' | P | C | A | | | | | |

FIG. 1

CYCLE
ADDED:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| A | C | G | T | A | C | G | T |



1

2

Sample 1:

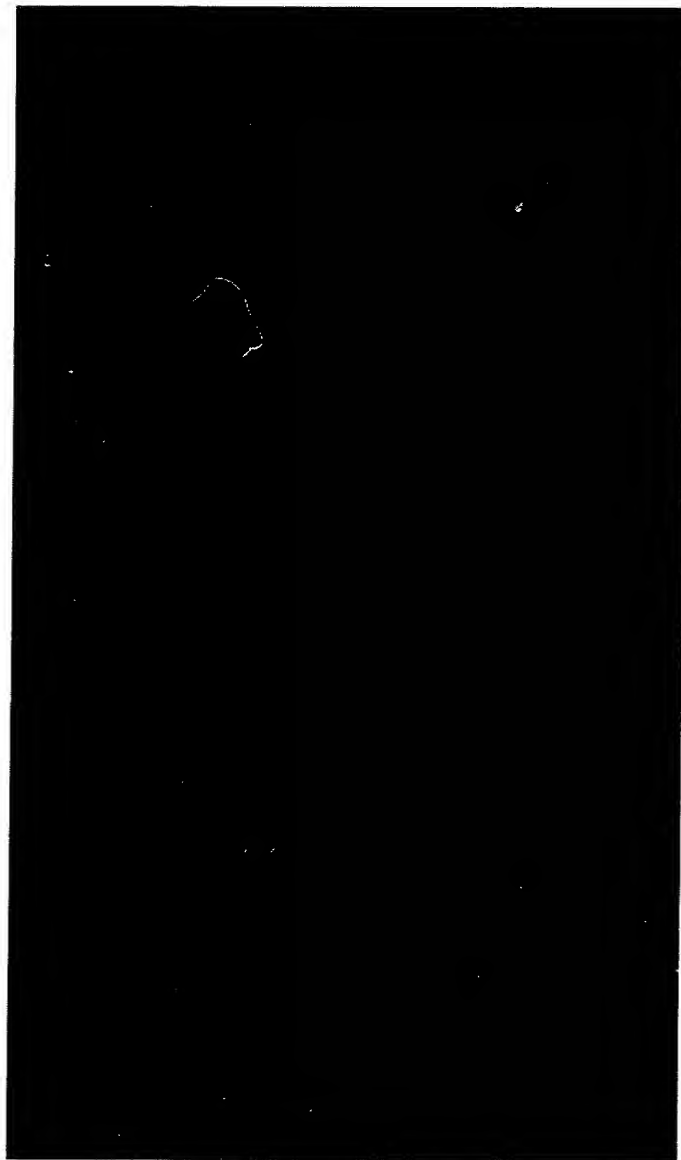
| | | | | | | | | |
|----|----|---|---|---|---|---|---|-------|
| 3' | P' | A | G | C | T | G | T | ...5' |
| 5' | P | T | C | G | | | | |

Sample 2:

| | | | | | | | | |
|----|----|---|---|---|---|---|---|-------|
| 3' | P' | G | T | C | T | A | T | ...5' |
| 5' | P | C | A | G | | | | |

FIG. 2

| | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|----|
| CYCLE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| ADDED: | A | C | G | T | A | C | G | T | A | C |



1

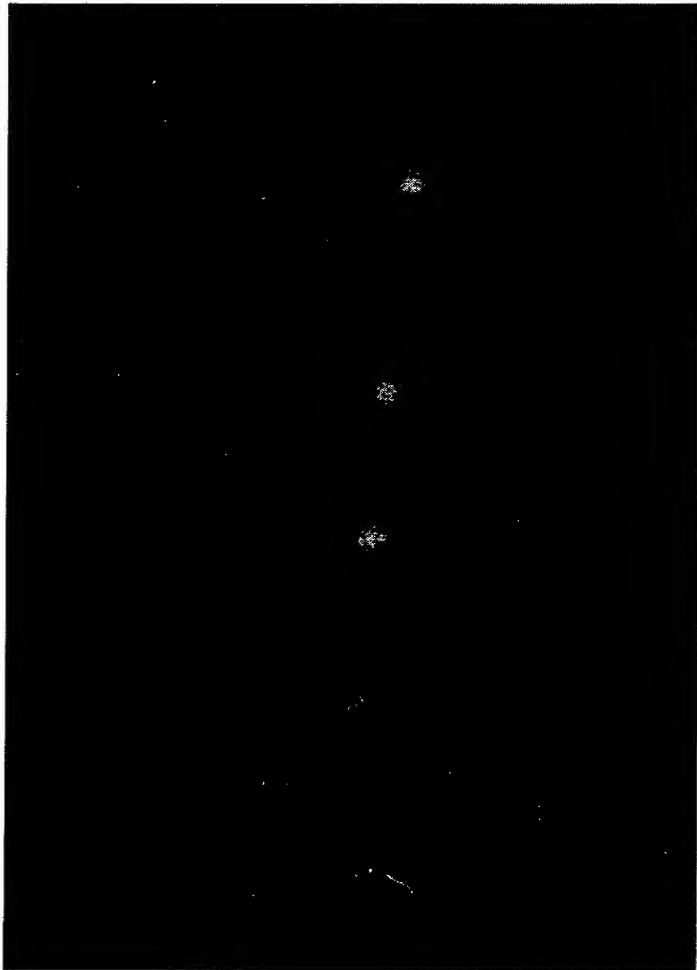
2

| | | | | | | | | | |
|-----------|----|--|---|---|---|---|---|---|-------|
| Sample 1: | 3' | <div style="border: 1px solid black; padding: 2px;">P'</div> | A | G | C | T | G | T | ...5' |
| | 5' | <div style="border: 1px solid black; padding: 2px;">P</div> | T | C | G | A | C | | |
| Sample 2: | 3' | <div style="border: 1px solid black; padding: 2px;">P'</div> | G | T | C | T | A | T | ...5' |
| | 5' | <div style="border: 1px solid black; padding: 2px;">P</div> | C | A | G | A | | | |

FIG. 3

CYCLE
ADDED:

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| A | C | G | T | A | C | G | T | A | C | G | T |



1

2

| | | | | | | | | | |
|-----------|----|----|---|---|---|---|---|---|-------|
| Sample 1: | 3' | P' | A | G | C | T | G | T | ...5' |
| | 5' | P | T | C | G | A | C | | |
| Sample 2: | 3' | P' | G | T | C | T | A | T | ...5' |
| | 5' | P | C | A | G | A | T | | |

FIG. 4

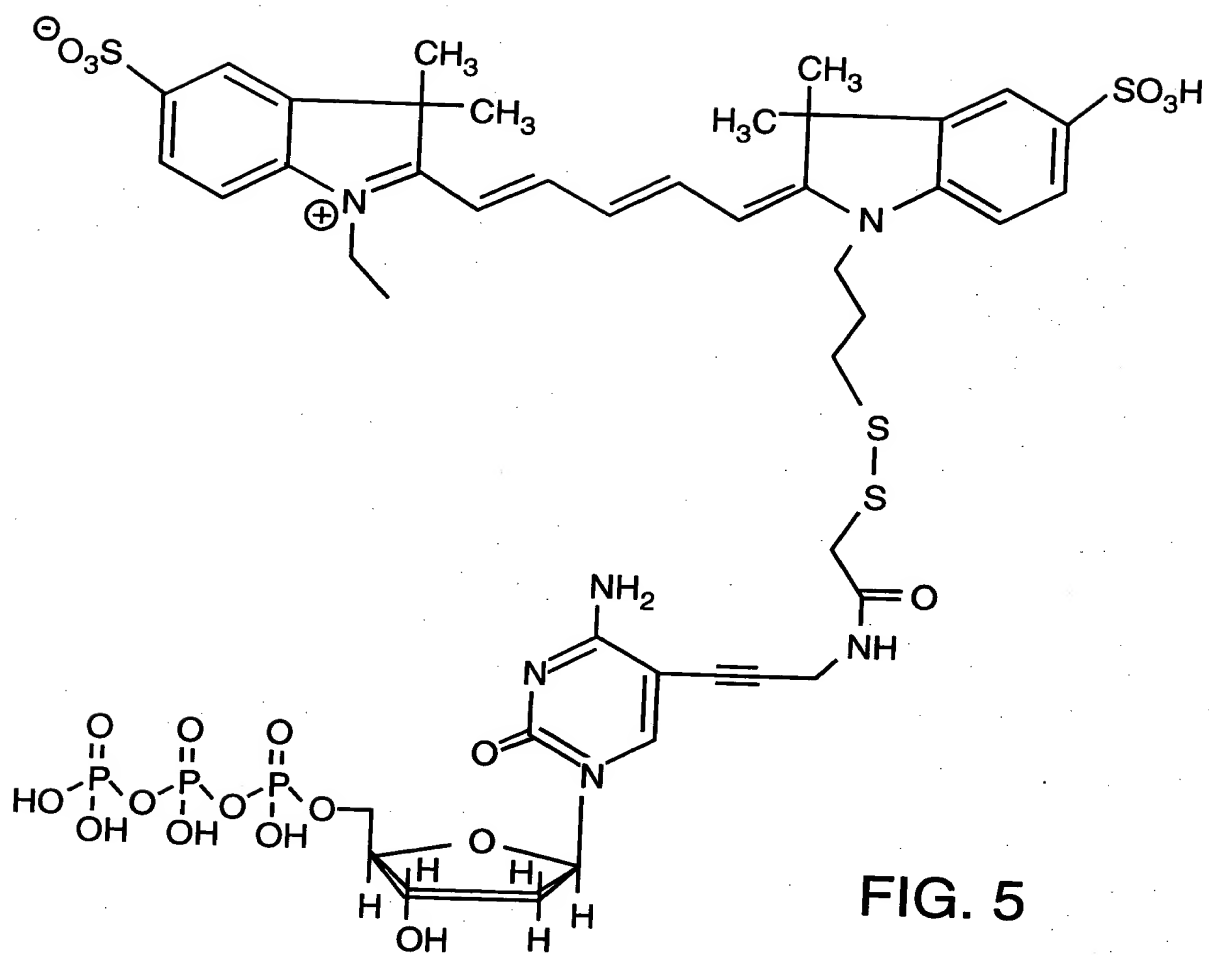
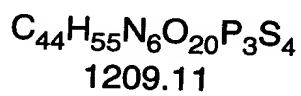
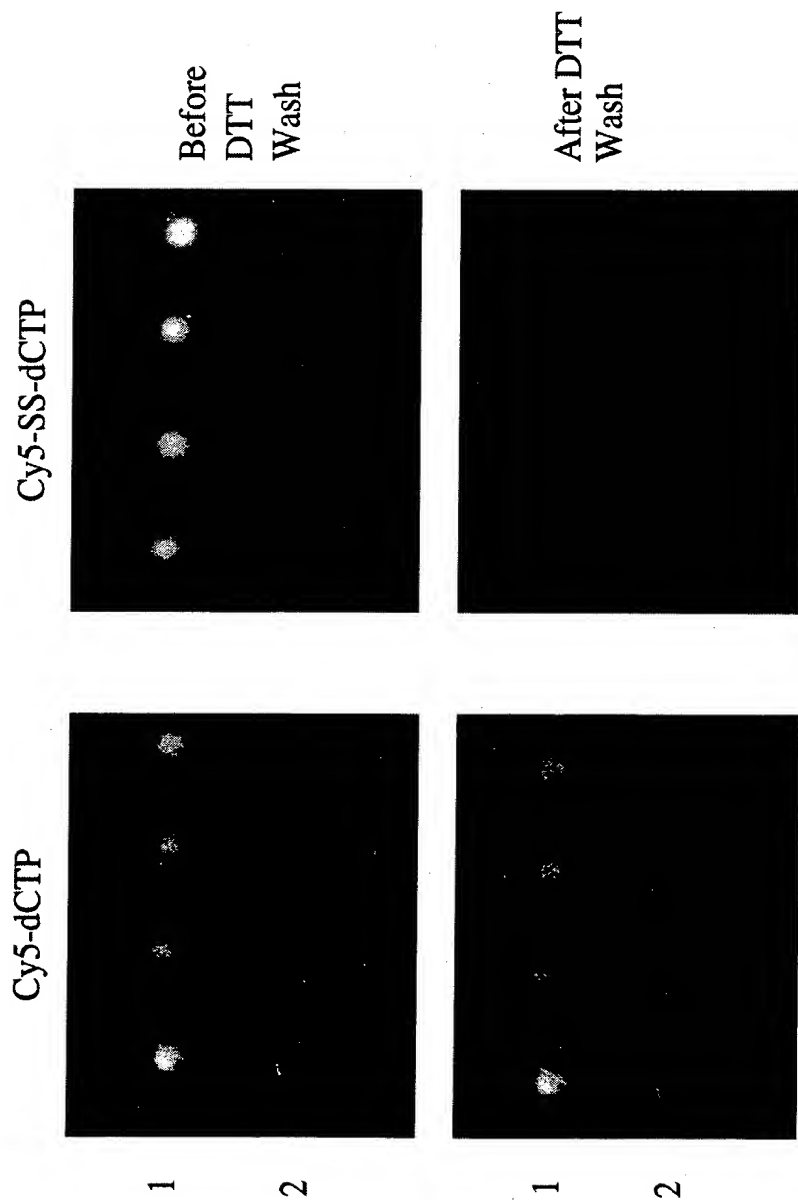


FIG. 5





| Sample 1: | 3' | P' | G | T | C | T | A | T | ...5' |
|-----------|----|----|---|---|---|---|---|---|-------|
| | 5' | P | C | | | | | | |

Sample 2:

| | | | | | | | | |
|----|----|---|---|---|---|---|---|-------|
| 3' | P' | A | G | C | T | G | T | ...5' |
| 5' | P | | | | | | | E |

FIG. 6

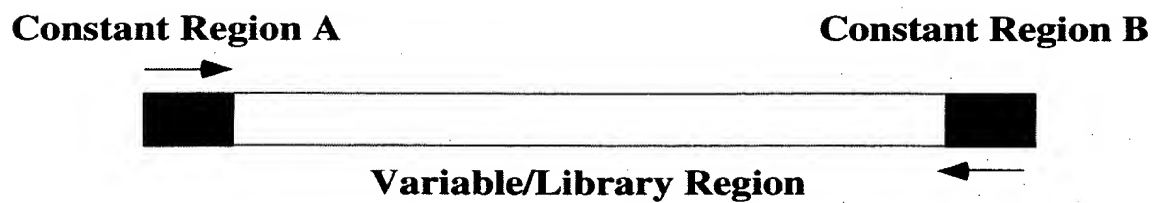


FIG. 7

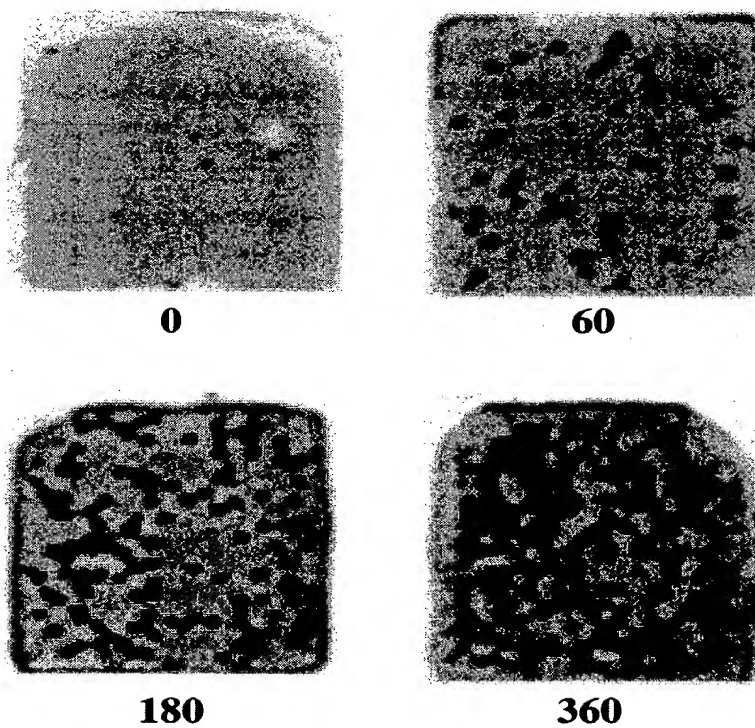


FIG. 8A

09767764.012301

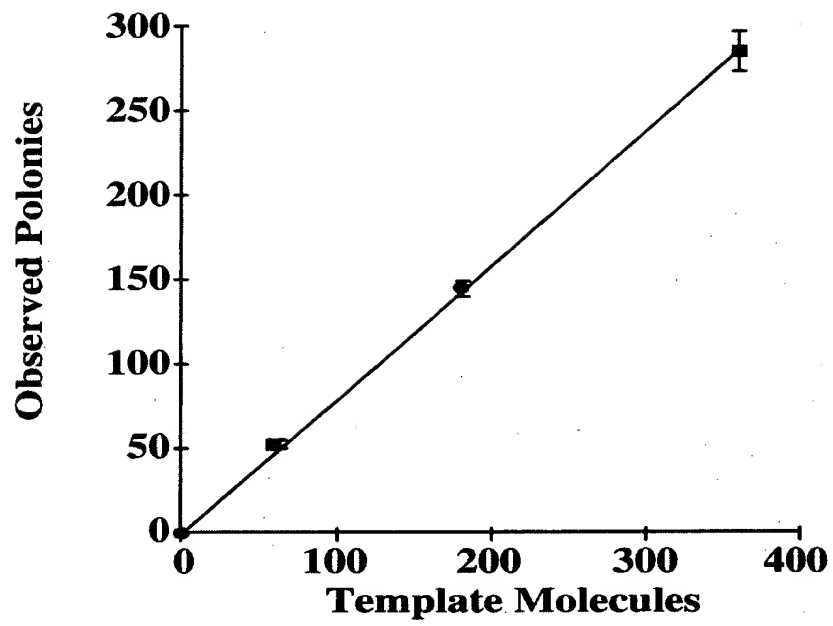


FIG. 8B



FIG. 8C

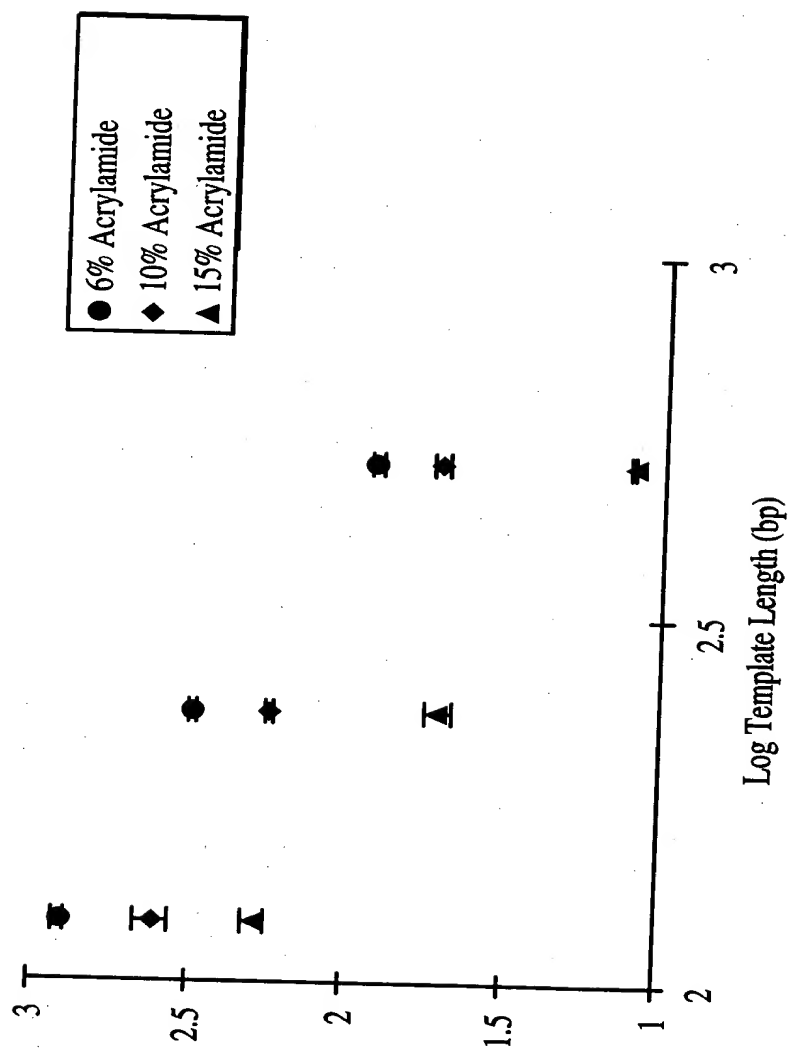


FIG. 9A

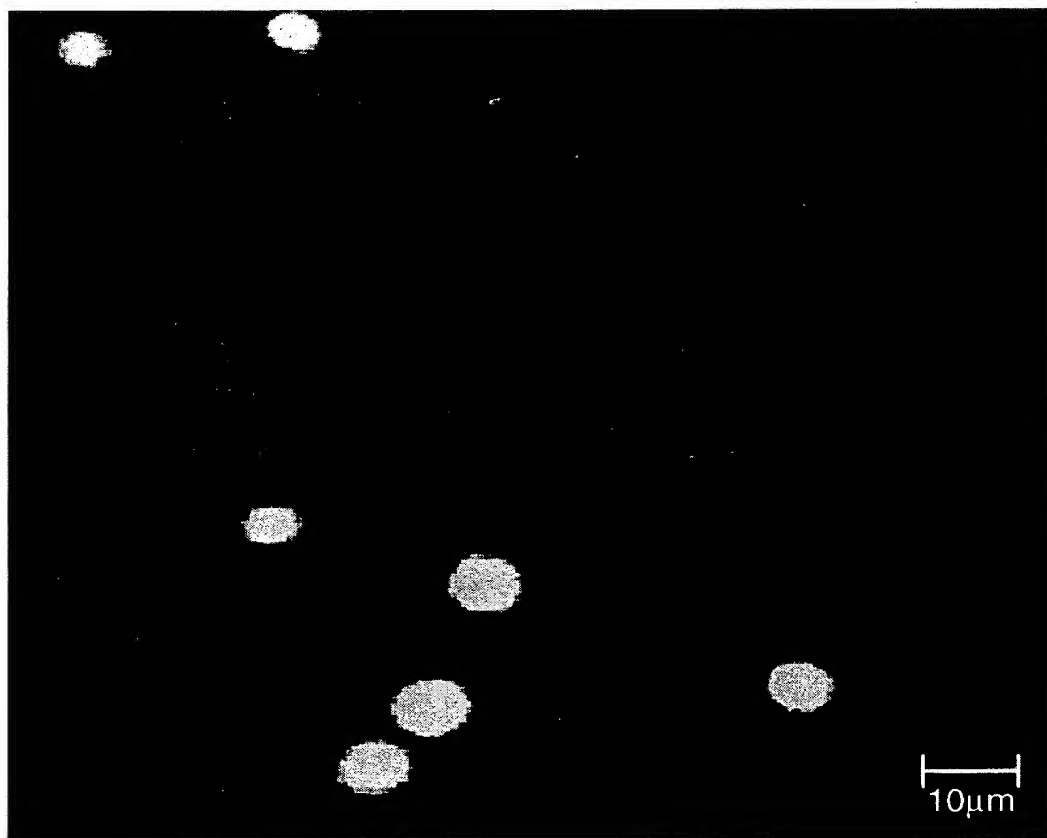


FIG. 9B

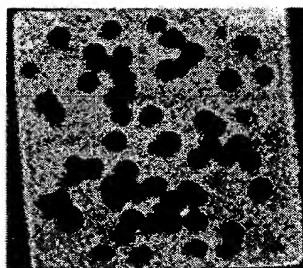


FIG. 10A

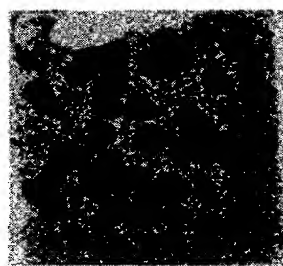


FIG. 10B

09767764, 012301